

ABSTRACT

A furcated orthopedic bone screw includes a threaded portion that is cut or slotted into multiple radial segments. The furcated bone screw can be bifurcated, trifurcated, or have a number of radial segments greater than two or three. Each of the radial segments of the furcated bone screw is plastically deformed in a radially outward direction to create a compressible screw tip of increased diameter over the non-furcated portion of the bone screw. The resilient and elastic properties of the furcated bone screw material enable the compression of the radial segments during insertion of the furcated bone screw into a bone or prosthetic. Once inserted, the resilient properties of the furcated bone screw material cause the radial segments of the screw tip to return to their plastically deformed radially expanded state, thus causing a radial force against the screw hole and the bone or prosthetic. The radial force of the threaded radial segments results in the furcated bone screw being better able to engage the bone or prosthetic to resist pull-out and compensate for stripped threads or soft bone.